

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE CLAIMS

Claim 1 has been amended to clarify the features of the present invention whereby: (i) a light quantity of a second light emission by the light emitter is determined based on an electric signal into which an image picked up with a first light emission by the light emitter is converted; (ii) the determining section makes a determination of whether the electric signal produced by the image pickup unit has a proper brightness, in a case where the image is picked up by the image pickup unit with the first light emission by the light emitter; and (iii) the controller controls the memory to store the image data corresponding to the electric signal used by the determining section for making the determination, and inhibits the second light emission by the light emitter only if a result of the determination of the determining section is "proper" with respect to the electric signal which is produced by the image pickup unit by converting the image picked up by the image pickup unit with the first light emission by the light emitter, as supported by the disclosure in the specification at page 13, line 26 to page 14, line 9.

In addition, claim 5 has been similarly amended to clarify the feature of the present invention whereby the controller in the CPU controls the memory to store the image data corresponding to the electric signal used by the determining section for the determination if a result of the determination of the determining section is "proper" with respect to the electric signal which is produced by the image pickup unit by converting the image picked up thereby with the light emitted from the stroboscopic light emitter, as supported by the disclosure in the specification at page 13, line 26 to page 14, line 9.

Claims 6, 10 and 13, moreover, have been amended in a manner corresponding to claim 5.

And still further, claims 2, 4 and 14 have been amended to reflect the amendments to claims 1 and 13, respectively.

No new matter has been added, and it is respectfully requested that the amendments to claims 1, 2, 4, 5, 6, 10, 13 and 14 be approved and entered.

THE PRIOR ART REJECTIONS

Claims 1, 2 and 5-14 were rejected under 35 USC 103 as being obvious in view of previously cited USP 6,426,775 ("Kurokawa"); and claims 3 and 4 were rejected under 35 USC 103 as being obvious in view of the combination of Kurokawa and previously cited JP 07-015655 ("Kitajima"). These rejections, however, are

respectfully traversed with respect to the claims as amended hereinabove.

According to the present invention as recited in amended claim 1, an image pickup device equipped with a light emitter is provided which determines a light quantity of a second light emission by the light emitter based on an electric signal into which an image picked up with a first light emission by the light emitter is converted, wherein the image pickup device comprises, in particular, a determining section which makes a determination of whether the electric signal produced by the image pickup unit has a proper brightness, in a case where the image is picked up by the image pickup unit with the first light emission by the light emitter. As recited in amended claim 1, a controller controls the memory to store the image data corresponding to the electric signal used by the determining section for making the determination, and inhibits the second light emission by the light emitter, only if a result of the determination of the determining section is "proper". with respect to the electric signal which is produced by the image pickup unit by converting the image picked up by the image pickup unit with the first light emission by the light emitter.

That is, as described in the specification at, for example, at page 15, line 22 to page 19, line 6, when a shutter button 37 is depressed, a pre-light emission control signal is sent to the

strobe light emitter 11 to cause a pre-light emission. An image is picked up with the pre-light emission, and the light quantity determining unit 113 determines whether the light quantity in the image picked up with the pre-light emission falls within a range of specified values. If the light quantity falls within the specified range, then the image is stored. If the light quantity in the image does not fall within the specified range, the main light emission indicating unit 115 sends a signal to the strobe light emitter 11 to cause the strobe light emitter 11 to carry out a main light emission (greater than the pre-light emission). The image picked up with the main light emission is then stored.

By contrast, in the image pickup apparatus of Kurokawa, it is determined whether the brightness is low ("dark") (Step S204). If the brightness is detected to be "dark", then the capacitor of the flash emission part 15 is charged. However, if the brightness is detected to be "not dark", then the capacitor is not charged. Thus, according to the teachings of Kurokawa, the determination of whether the brightness is low ("dark") is made without any light emission from the flash emitter. And it is therefore respectfully submitted that Kurokawa does not at all disclose, teach or even remotely suggest the feature of the present invention as recited in claim 1 whereby the determining section makes a determination of whether the electric signal produced by the image pickup unit has a proper brightness, in a case where

the image is picked up by the image pickup unit with the first light emission by the light emitter.

In addition, it is respectfully pointed out that in the image pickup apparatus of Kurokawa, if the brightness is not detected to be "dark", then no light emission occurs at all (the capacitor is not charged). Thus, Kurokawa discloses that the flash either emits both a first light emission and a second light emission or no light emission at all. Accordingly, it is respectfully submitted that technique of Kurokawa merely corresponds to the conventional technique described in the BACKGROUND OF THE INVENTION section of the specification of the present application, whereby photographing is achieved through second light emission, whether or not a suitably bright image could have been obtained by the pre-light emission. And as described on page 2 of the specification, this type of image pickup apparatus requires that the capacitor be charged for the main light emission for each image pickup operation, which wastes power and results in a shorter battery life.

In short, it is respectfully submitted that Kurokawa clearly does not disclose, teach or suggest the feature of the claimed present invention whereby the memory is controlled to store image data corresponding to the electric signal used by the determining section, and to inhibit the second light emission by the light emitter, only when the result of the determination of

the determining section is "proper", as recited in amended claim 1.

According to the present invention as recited in clarified amended claims 5 and 6, moreover, an image pickup device (apparatus) is provided which comprises, in particular, a determining section which makes a determination of whether or not the electric signal produced by the image pickup unit is a proper image, in a case where the image is picked up by the image pickup unit with light emitted from the stroboscopic light emitter; wherein the controller controls the memory to store image data corresponding to the electric signal used by the determining section for the determination with respect to the electric signal which is produced by the image pickup unit by converting the image picked up thereby with the light emitted from the stroboscopic light emitter.

By contrast, as described hereinabove with respect to claim 1, in the image pickup apparatus of Kurokawa, the determination of whether the brightness is low ("dark") is made without any light emission from the flash emitter. Thus, it is respectfully submitted that Kurokawa also does not disclose, teach or suggest the features of the present invention as recited in amended claims 5 and 6 whereby the determining section makes a determination of whether or not the electric signal produced by the image pickup unit is a proper image, in a case where the

image is picked up by the image pickup unit with light emitted from the stroboscopic light emitter, as recited in amended claims 5 and 6.

In addition, it is respectfully submitted that since Kurokawa does not disclose performing a light quantity determination on an electric signal of an image picked up with a light emission, Kurokawa clearly also does not disclose, teach or suggest that the feature of the present invention recited in claims 5 and 6 whereby the controller controls the memory to store image data corresponding to the electric signal used by the determining section for the determination with respect to the electric signal which is produced by the image pickup unit by converting the image picked up thereby with the light emitted from the stroboscopic light emitter, as recited in amended claims 5 and 6.

Still further, according to the present invention as recited in clarified amended claim 10, an image pickup method is provided which comprises, in particular, determining a brightness of a state of an image picked up by the first image pickup operation carried out in timing with the first light emission; storing image data corresponding to an electric signal subjected to determination of the brightness of the state of the picked up image, if a result of the determination in the determining step is "at or above a predetermined value" with respect to the

brightness of the state of the image picked up by the first image pickup operation; and determining a second light emission value of the light emitter if the result of the determination in the determining step is "less than a predetermined value" with respect to the brightness of the state of the image picked up by the first image pickup operation.

By contrast, it is respectfully submitted that Kurokawa merely discloses using a first flash to calculate the distance of an object to determine a necessary light emission time for a second flash (column 5, lines 48-64). And it is respectfully submitted that Kurokawa clearly does not disclose, teach or suggest storing the image picked up by the first light emission if the brightness is above a predetermined brightness, and determining the value of the second light emission if the brightness of the image picked up with the first light emission is below a predetermined brightness. Instead, Kurokawa merely discloses that the first flash is always used to determine the required intensity of the second flash. Thus, as described hereinabove, Kurokawa merely corresponds to the type of image pickup apparatus described in the BACKGROUND OF THE INVENTION section of the specification of the present application.

On page 7 of the Office Action, the Examiner asserts that the feature of the present invention recited in claim 10 whereby the brightness of a state of an image picked up by the first

image pickup operation carried out in timing with the first light emission is determined corresponds to Step S204 of Kurokawa, whereby if a "dark" determination is made, a capacitor is charged, and if a "not dark" determination is made, the capacitor is not charged. However, as pointed out hereinabove, this determination in Kurokawa does not occur with respect to an image picked up by the first image pickup operation carried out in timing with the first light emission, in the manner of the present invention as recited in amended claim 10.

Similarly, it is respectfully submitted that Kurokawa does not disclose, teach or suggest the features of the present invention as recited in clarified amended claim 13, whereby the determining section makes a determination of whether or not an electric signal which is produced by a first image pickup operation and conversion of the image pickup unit has a proper brightness, wherein the first image pickup operation of the image pickup unit is performed at the same time as the light emitter emits the light in timing with the first image pickup timing of the image pickup unit, and whereby the memory is controlled to store image data corresponding to an electric signal subjected to determination by the determining section, if a result of the determination by the determining section is "proper", and to store image data corresponding to an electric signal which is produced by a second image pickup operation and conversion of the

image pickup, if the result of the determination by the determining section is "not proper".

Finally, it is noted that Kitajima has merely been cited for the disclosure of prohibiting storing of an image.

In view of the foregoing, it is respectfully submitted that the present invention as recited in each of amended independent claims 1, 5, 6, 10 and 13, as well as each of claims 2-4, 7-9, 11, 12 and 14 respectively depending therefrom, clearly patentably distinguishes over Kurokawa, taken singly or in combination with Kitajima, under 35 USC 103.

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Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned for prompt action.

Respectfully submitted,



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